

Supplementary Table 12. Linear regression of age acceleration on smoking, sex, BMI, and telomere length (non-sex specific tissues only).

Observations	<i>Blood</i>		<i>Colon</i>		<i>Kidney</i>		<i>Lung</i>		<i>Muscle</i>	
	<i>51</i>		<i>205</i>		<i>47</i>		<i>194</i>		<i>43</i>	
	Beta	p	Beta	p	Beta	p	Beta	p	Beta	p
Horvath										
Smoking	3.76	0.055	0.63	0.328	-4.13	0.003	-0.39	0.593	-3.34	0.039
Sex	2.43	0.250	0.14	0.820	-1.14	0.368	-0.13	0.857	-1.84	0.219
BMI	0.53	0.009	0.13	0.085	-0.32	0.034	0.17	0.050	0.09	0.581
TQI	1.26	0.738	-0.59	0.421	-4.33	0.009	-0.18	0.901	-0.45	0.825
Hannum										
Smoking	1.03	0.565	-3.43	0.106	-0.40	0.738	1.96	0.005	-1.83	0.152
Sex	1.36	0.488	-1.49	0.470	-0.33	0.775	0.01	0.991	-2.25	0.065
BMI	0.15	0.398	0.14	0.566	-0.07	0.609	0.12	0.138	0.07	0.596
TQI	-3.26	0.357	2.32	0.338	3.02	0.044	-0.54	0.688	-1.94	0.243
EpiTOC										
Smoking	0.00	0.838	-0.01	0.027	-0.00	0.599	0.01	0.003	-0.00	0.883
Sex	0.01	0.288	-0.02	0.015	0.00	0.397	0.00	0.787	-0.00	0.647
BMI	0.00	0.462	0.00	0.372	0.00	0.485	0.00	0.198	-0.00	0.949
TQI	-0.01	0.714	-0.01	0.303	0.00	0.851	-0.01	0.020	-0.00	0.388
PhenoAge										
Smoking	1.62	0.557	-3.53	0.200	-1.92	0.369	4.92	< 0.001	-0.97	0.596
Sex	-0.26	0.931	1.05	0.694	-2.42	0.241	2.37	0.024	0.05	0.978
BMI	0.02	0.954	0.11	0.734	-0.05	0.834	-0.10	0.418	0.15	0.452
TQI	-1.26	0.815	5.64	0.074	6.02	0.023	-5.49	0.009	-1.45	0.544
EpiClock										
Smoking	3.82	0.026	-1.52	0.128	-0.98	0.454	2.00	0.001	-1.96	0.104
Sex	2.99	0.106	-1.20	0.215	-0.85	0.498	0.65	0.232	0.44	0.692
BMI	0.30	0.080	0.08	0.501	-0.01	0.967	0.07	0.284	0.14	0.285
TQI	0.54	0.868	0.19	0.869	-0.09	0.957	-1.85	0.095	-0.19	0.900
AltumAge										
Smoking	6.96	0.024	-0.69	0.557	-3.49	0.071	3.64	0.002	-2.22	0.313
Sex	4.15	0.209	1.88	0.099	0.77	0.674	1.40	0.218	0.23	0.911
BMI	0.70	0.024	0.29	0.039	-0.14	0.515	0.16	0.240	0.26	0.280
TQI	-1.05	0.858	-1.52	0.257	-3.76	0.107	-1.96	0.392	2.30	0.422
Zhang										
Smoking	-2.32	0.214	-2.18	0.040	-0.095	0.940	0.180	0.004	-3.82	0.086
Sex	3.12	0.126	0.166	0.871	-0.725	0.555	0.275	0.693	0.150	0.941
BMI	0.007	0.967	0.129	0.303	0.014	0.920	0.098	0.239	0.122	0.596
TQI	-14.3	< 0.001	1.83	0.130	-1.62	0.296	-2.13	0.129	-0.202	0.942
Pace										
Smoking	0.009	0.898	0.064	0.014	0.420	0.224	0.083	< 0.001	0.006	0.805
Sex	-0.034	0.664	0.002	0.938	-0.105	0.917	-0.029	0.088	0.045	0.039
BMI	-0.003	0.651	-0.001	0.632	0.001	0.722	-0.002	0.226	0.001	0.596
TQI	-0.173	0.222	-0.064	0.030	-0.091	0.032	0.486	0.150	0.038	0.201

The effect of sex is in reference to male and the effect of smoking is reference to non-smokers.

Supplementary Table 13. Linear regression of age acceleration on smoking, BMI, telomere length (sex specific tissues only).

Observations	Breast		Ovary		Prostate		Testis	
	36		142		111		45	
	Beta	p	Beta	p	Beta	p	Beta	p
Horvath								
Smoking	-0.39	0.841	1.29	0.078	-0.81	0.438	4.62	0.032
BMI	0.46	0.049	-0.06	0.511	0.16	0.225	-0.29	0.217
TQI	0.32	0.913	-0.68	0.591	-3.88	0.023	-3.55	0.039
Hannum								
Smoking	-2.28	0.073	-0.65	0.339	-1.39	0.234	1.23	0.279
BMI	0.41	0.008	0.02	0.775	0.26	0.075	-0.26	0.045
TQI	-0.31	0.868	0.97	0.405	-4.58	0.017	-1.88	0.042
EpiTOC								
Smoking	-0.01	0.241	-0.00	0.301	0.00	0.979	0.00	0.204
BMI	-0.00	0.856	-0.00	0.262	-0.00	0.862	0.00	0.546
TQI	0.01	0.431	0.00	0.669	-0.01	0.116	0.00	0.457
PhenoAge								
Smoking	-4.20	0.193	0.69	0.449	-0.38	0.838	1.94	0.205
BMI	0.56	0.139	-0.00	0.996	0.40	0.091	0.12	0.477
TQI	8.09	0.098	0.25	0.872	-4.84	0.110	-0.43	0.727
EpiClock								
Smoking	0.02	0.991	0.02	0.973	0.12	0.933	5.12	0.037
BMI	0.20	0.394	0.01	0.870	0.08	0.644	-0.27	0.327
TQI	3.82	0.213	1.48	0.145	-5.38	0.017	-5.54	0.006
AltumAge								
Smoking	-5.55	0.125	2.02	0.185	-1.27	0.354	6.82	0.103
BMI	0.44	0.296	-0.02	0.909	0.08	0.660	-0.50	0.286
TQI	0.76	0.886	1.04	0.692	-6.53	0.004	-6.38	0.059
Zhang								
Smoking	-1.32	0.339	0.009	0.995	-0.378	0.677	6.45	0.034
BMI	0.297	0.072	-0.194	0.154	0.196	0.088	-0.085	0.799
TQI	1.31	0.542	0.906	0.651	-4.38	0.004	-4.34	0.073
Pace								
Smoking	0.118	0.003	0.007	0.547	0.334	0.222	-0.008	0.588
BMI	0.008	0.082	0.001	0.518	-0.006	0.108	0.004	0.032
TQI	0.082	0.146	-0.009	0.669	-0.075	0.093	0.005	0.700

The effect of smoking is in reference to non-smoking.